

# **PALM INTRANET**

Day: Sunday Date: 10/2/2005

Time: 18:24:30

# **Inventor Name Search Result**

Your Search was:

Last Name = WESTIN

First Name = MATS

| Application# | Patent#       | Status | Date Filed | Title                          | Inventor Name |
|--------------|---------------|--------|------------|--------------------------------|---------------|
| 10522133     | Not<br>Issued | 30     | 02/15/2005 | Furan polymer impregnated wood | WESTIN, MATS  |

Inventor Search Completed: No Records to Display.

|                          | Last Name | First Name |        |
|--------------------------|-----------|------------|--------|
| Search Another: Inventor | Westin    | ∕ats       | Search |

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

# **Hit List**

Clear **Bkwd Refs** Generate Collection Print Fwd Refs Generate OACS

**Search Results -** Record(s) 1 through 10 of 12 returned.

#### 1. Document ID: US 20050170165 A1

AB: A <u>furan polymer</u> impregnated wood which comprises wood impregnated with a polymerizable furfuryl alcohol monomer mixture containing at least <u>furfuryl alcohol</u>, stabilizing co-solvent water, and an inidator selected from the group consisting of anhydrides, acids and combinations thereof is described. A method for preparing a furan impregnated wood and uses thereof is also described.

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw Des

## 2. Document ID: US 20040028933 A1

A furan polymer impregnated wood which is uniform in colour and density throughout the treated zone. In order to obtain the polymer impregnated wood, a parent wood has been impregnated with a mixture containing polymerizable organic compounds of at least furfuryl alcohol and one further compound. The invention also relates to a method for preparing a furan polymer impregnated wood and uses thereof.

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw Des

#### 3. Document ID: US 20020192400 A1

A furan polymer impregnated wood which comprises wood impregnated with a polymerizable furfural alcohol monomer solution containing at least water, stabilizers, and furfuryl alcohol, and at least one further compound selected from the group consisting of anhydrides, acids and combinations thereof is described.

A method for preparing a furan polymer impregnated wood and uses thereof is also described.

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw, Des

Record List Display Page 2 of 5

## 4. Document ID: US 6077883 A

AB: The present invention relates to a glass fiber binding composition having an effective binding amount of a <u>furan</u> resin, an effective emulsifying amount of an emulsifier agent, and sufficient amount of water to result in a binding composition having from 0.5 to 80% N.V. The invention further pertains to a process of binding glass fibers at junctions of the fibers comprising the steps of providing glass fibers, applying an effect binding amount of an emulsified glass fiber binding composition to the junctions of the glass fibers, and curing the binder at the junctions of the glass fibers. Finally, the invention also discloses a glass fiber composition comprising a plurality of glass fibers having a plurality of junctions where two or more fibers meet, and an effective binding amount of an emulsified glass fiber binding composition applied to a portion of the junctions of the glass fibers.

| Full | Title | Citation | Front | Review Clas | sification Da | ile F | Reference | Claims | KMC Draw, Des |
|------|-------|----------|-------|-------------|---------------|-------|-----------|--------|---------------|
|      |       |          |       | -           |               |       |           |        |               |

#### 5. Document ID: US 5719228 A

The present invention relates to a glass fiber binding composition having an effective binding amount of an aqueous compatible furan resin mixed with sufficient water to result in a binding composition having from 0.5 to 80% nonvolatile. The aqueous compatible furan resin is the reaction product of a source of ammonia and a first reaction product, the first reaction product being derived from the reaction of an acidic furan resin, a source of reactable formaldehyde, and a formaldehyde scavenger. The invention further pertains to a process of binding glass fibers at junctions of the fibers comprising the steps of providing glass fibers, applying an effect binding amount of the binding composition of the invention to the glass fibers such that the binder is present at a portion of the junctions, and curing the resin at the junctions of the glass fibers. Finally, the invention also discloses glass fiber compositions comprising a plurality of glass fibers having a plurality of junctions where two or more fibers meet, and an effective binding amount of the binding composition of the invention.

| • |      |       | ,        | p     |                       |                                    |
|---|------|-------|----------|-------|-----------------------|------------------------------------|
| 1 | Full | Title | Citation | Front | Review Classification | Date Reference Claims KWC Draw Des |
|   |      |       |          |       |                       |                                    |

#### 6. Document ID: US 5589536 A

AB: The present invention relates to a glass fiber binding composition comprising an effective binding amount of an aqueous soluble furan resin, 15 to 99 percent by weight water, and an effective amount of a catalyst for curing the furan resin. The invention further pertains to a process of binding glass fibers at junctions of the fibers comprising the steps of providing newly formed glass fibers, applying an effect binding amount of an aqueous soluble furan resin to the junctions of the glass fibers, and curing the resin at the junctions of the glass fibers. Finally, the invention also discloses a glass fiber composition comprising a plurality of glass fibers having a plurality of junctions where two or

Record List Display Page 3 of 5

more fibers meet, and an effective binding amount of an aqueous soluble furan resin comprising 15 to 99% water applied to the junctions of the glass fibers.

Full Title Citation Front Review Classification Date Reference Claims KWIC Draw Des

### 7. Document ID: US 5534612 A

The present invention relates to a glass fiber binding composition having an effective binding amount of an aqueous compatible furan resin mixed with sufficient water to result in a binding composition having from 0.5 to 80% nonvolatile. The aqueous compatible furan resin is the reaction product of a source of ammonia and a first reaction product, the first reaction product being derived from the reaction of an acidic furan resin, a source of reactable formaldehyde, and a formaldehyde scavenger. The invention further pertains to a process of binding glass fibers at junctions of the fibers comprising the steps of providing glass fibers, applying an effect binding amount of the binding composition of the invention to the glass fibers such that the binder is present at a portion of the junctions, and curing the resin at the junctions of the glass fibers. Finally, the invention also discloses glass fiber compositions comprising a plurality of glass fibers having a plurality of junctions where two or more fibers meet, and an effective binding amount of the binding composition of the invention.

Full Title Citation Front Review Classification Date Reference Claims KWC Draw Des

#### 8. Document ID: US 5459183 A

The present invention relates to furan resins having low levels of VOCs. The claimed furan resins are the reaction product of a source of ammonia and a first reaction product, said first reaction product being derived from the reaction between a source of reactable formaldehyde, a formaldehyde scavenger, and an acidic furan resin resulting from the polymerization reaction wherein at least one reagent is selected from the group consisting of the furan containing molecule having the general formula ##STR1## and its saturated analogs thereof having zero to one carbon-carbon double bonnets, wherein X and Y are independently comprised of organic molecular groups.

The invention further pertains to a method of decreasing formaldehyde in undesirable volatile organic compounds in furan resins, consisting of the steps of providing an acidic aqueous compatible furan resin, providing a source of reactable formaldehyde, mixing a formaldehyde scavenger with the furan resin in the presence of the source of reactable formaldehyde to form a first mixture, heating the first mixture to a temperature of less than 100.degree. C. for a period of from one to ten hours, adding a source of ammonia to the first mixture to form a second mixture, and heating the second mixture to a temperature of less than 100.degree. C. for a period of from one to ten hours.

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Des

## 9. Document ID: US 20050170165 A1, WO 2004011216 A2, NO 200203593 A, AU 2003247294 A1, NO 318254 B1, EP 1526954 A2, BR 200312956 A

NOVELTY - A furan polymer impregnated wood comprises wood impregnated with polymerizable furfuryl alcohol monomer mixture having water, furfuryl alcohol, stabilizer, and initiator. The stabilizer is from sodium carbonate, sodium bicarbonate, sodium citrate, phosphates, or water-soluble lignin derivatives, such as calcium and ammonium salts of lignosulfonic acids.

DETAILED DESCRIPTION - Furan polymer impregnated wood comprises wood impregnated with polymerizable <u>furfuryl alcohol</u> monomer mixture having water, furfuryl alcohol, stabilizer, and initiator. The stabilizer is from sodium carbonate, sodium bicarbonate, sodium citrate, phosphates, or water-soluble lignin derivatives, such as calcium and ammonium salts of lignosulfonic acids. The initiator is from <a href="maleic">maleic</a> anhydride, phthalic anhydride, benzoic acid, malonic acid, ascorbic acid, boric acid, citric acid, zinc chloride, aluminum chloride, and/or other cyclic organic anhydrides and acids. An INDEPENDENT CLAIM is also included for a method for preparing a furan polymer impregnated wood comprising providing a wood impregnated with polymerizable furfuryl alcohol monomer mixture having water, <u>furfuryl alcohol</u>, stabilizer, and initiator; and curing the mixture.

USE - The invention is for use as building parts, such as fascia, cornice, siding, sills, frames, and millwork; boat parts, such as frames, planking, and decks; marine items, such as docks, piers, lobster traps, and weir poles; outdoor items, such as furniture, decks, railings and stairs, walkways, boardwalks, and playground equipment; bridge parts, such as beams, railings, and decking; railway sleepers; cooling tower slats; utility poles; heavy timers; fence posts; stakes; highway items, such as guard rail posts, guard rail plates, sign posts, and light poles; and flooring and containers, such as tanks, and buckets (claimed).

ADVANTAGE - The invention has uniform color and density throughout the treated zone. It provides improved properties, such as dimensional stability, decay, and weather resistance.

Full Title Citation Front Review Classification Date Reference Claims KWC Draw Des

## 10. Document ID: BR 200312905 A, WO 2004011214 A2, NO 200203592 A, AU 2003247295 A1, NO 318253 B1, EP 1534480 A2

NOVELTY - A <u>furan polymer</u> impregnated <u>wood comprises wood</u> impregnated with polymerizable furfuryl alcohol monomer mixture having water, furfuryl alcohol, stabilizer, and initiator. The stabilizer is from sodium carbonate, sodium bicarbonate, sodium citrate, phosphates, or

water-soluble lignin derivatives, such as calcium and ammonium salts of lignosulfonic acids.

DETAILED DESCRIPTION - Furan polymer impregnated wood comprises wood impregnated with polymerizable furfuryl alcohol monomer mixture having water, furfuryl alcohol, stabilizer, and initiator. The stabilizer is from sodium carbonate, sodium bicarbonate, sodium citrate, phosphates, or water-soluble lignin derivatives, such as calcium and ammonium salts of lignosulfonic acids. The initiator is from maleic anhydride, phthalic anhydride, benzoic acid, malonic acid, ascorbic acid, boric acid, citric acid, zinc chloride, aluminum chloride, and/or other cyclic organic anhydrides and acids. An INDEPENDENT CLAIM is also included for a method for preparing a furan polymer impregnated wood comprising providing a wood impregnated with polymerizable furfuryl alcohol monomer mixture having water, furfuryl alcohol, stabilizer, and initiator; and curing the mixture.

USE - The invention is for use as building parts, such as fascia, cornice, siding, sills, frames, and millwork; boat parts, such as frames, planking, and decks; marine items, such as docks, piers, lobster traps, and weir poles; outdoor items, such as furniture, decks, railings and stairs, walkways, boardwalks, and playground equipment; bridge parts, such as beams, railings, and decking; railway sleepers; cooling tower slats; utility poles; heavy timers; fence posts; stakes; highway items, such as guard rail posts, guard rail plates, sign posts, and light poles; and flooring and containers, such as tanks, and buckets (claimed).

ADVANTAGE - The invention has uniform color and density throughout the treated zone. It provides improved properties, such as dimensional stability, decay, and weather resistance.

| Full   Title   Citation   Front   Review   Classification   Date   Reference   Claims   KMC   D | raw. Des |
|---|----------|
|   |          |
| Clear Generate Collection Print Fwd Refs Bkwd Refs Generate OAC                                 | S        |
|   |          |
| Terms Documents   |          |
| L3 and maleic   12  |          |

Change Format Display Format: AB

Previous Page Next Page Go to Doc#

# **Hit List**

Clear Generate Collection Print Fwd Refs Bkwd Refs
Generate OACS

**Search Results -** Record(s) 11 through 12 of 12 returned.

11. Document ID: ES 2230473 T3, WO 200260660 A1, NO 200100558 A, NO 313273 B1, US 20020192400 A1, EP 1368167 A1, BR 200206876 A, AU 2002230310 A1, CN 1489512 A, JP 2004520199 W, NZ 527842 A, EP 1368167 B1, DE 60201584 E, ZA 200306780 A, MX 2003006848 A1, AU 2002230310 B2

AB: NOVELTY - A <u>furan polymer</u> impregnated <u>wood</u>, <u>has wood</u> impregnated with a polymerizable furfural alcohol monomer solution containing at least water, stabilizers, <u>furfuryl alcohol</u>, and one further compound selected from <u>maleic</u> anhydride, phthalic anhydride, <u>maleic</u> acid, malic acid, phthalic acid, and combinations.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for preparing a <u>furan polymer</u> impregnated <u>wood</u>, <u>such that the wood</u> is impregnated by one impregnation step with polymerizable furfural alcohol monomer solution containing at least water, stabilizers, and <u>furfuryl alcohol</u>, and at least one further compound selected from the group consisting of anhydrides, acids and combinations, followed by a curing step.

USE - Use of a <u>furan polymer</u> impregnated as building parts (fascia, cornice, siding, sills, frames, millwork), boat parts(frames, planking, decks), marine items (docks, piers, lobster traps, weir poles), outdoor items (furniture, decks, railings and stairs, walkways, boardwalks, playground equipment), bridge parts (beams, railings, decking), railway sleepers, cooling tower slats, utility poles, heavy timbers, fenceposts, stakes, highway items (guard rail posts, guard rail plates, sign posts, light poles) and container (tanks, buckets) (all claimed).

ADVANTAGE  $\underline{\hspace{0.1cm}}$  Furan polymer impregnated  $\underline{\hspace{0.1cm}}$  wood is uniform in color and density throughout the treated zone.

| Full | Title | Citation | Front | Review | Classification | Date | Reference |  | ε | laims | KVINC | Draw | n Des |
|------|-------|----------|-------|--------|----------------|------|-----------|--|---|-------|-------|------|-------|
|      |       |          |       |        |                | •    |           |  |   |       |       |      |       |

12. Document ID: DE 60104891 T2, WO 200230638 A2, NO 200005137 A, AU 200222818 A, NO 313183 B1, EP 1341648 A2, BR 200114484 A, US 20040028933 A1, CN 1469798 A, JP 2004512193 W, NZ 525750 A, EP 1341648 B1, DE 60104891 E, ZA 200303629 A, ES 2227311 T3, AU 2002222818 B2

AB: NOVELTY - A <u>furan polymer</u> impregnated <u>wood comprises a wood</u> impregnated with polymerizable furfural alcohol monomer solution containing <u>furfuryl alcohol</u> and one further compound, such as, <u>maleic</u> anhydride, <u>phthalic</u> anhydride, <u>maleic</u> acid, malic acid, and/or phthalic acid.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of preparing a <u>furan polymer</u> impregnated <u>wood</u> comprising impregnating a <u>wood</u> with a polymerizable furfural alcohol monomer solution, followed by a curing step.

USE - As knife handles, kitchenware (spoons, forks, cutting boards, bowls), furniture, indoor flooring, countertops, building parts (facia, cornice, siding, sills, frames), boat parts (rails, flooring, deck trim, deck flooring, furniture, fittings), marine items (docks, piers, lobster traps), out-door furniture, gunstocks and pistol grips, musical instrument parts (piano keys, violin and guitar fingerboards and bridges), cooling tower slats, outdoor walkways, containers (tanks for caustics or corrosives), machine parts (conveyor slats, saw guides, saw and planer table tops) (all claimed).

ADVANTAGE - The invention has improved properties, such as dimensional stability, rot resistance, and provides reduced maintenance requirements.

| Full Title Citatio | on Front Review Classific | cation Date Reference | Claims KMC Draw De   |
|--------------------|---------------------------|-----------------------|----------------------|
|                    |                           |                       |                      |
| Clear Ge           | nerate Collection         | Print Fwd Refs Bkwd   | I Refs Generate OACS |
|                    |                           |                       |                      |
| Terms              |                           | Documents             |                      |
| L3 and 1           | maleic                    |                       | 12                   |

Display Format: AB Change Format

Previous Page Next Page Go to Doc#